

OCHEV, V.G.

Comparison of middle and upper Triassic deposits in the  
Chkalev and Bashkiy parts of the Ural Mountain region. Nauch.  
dekl. vys. shkoly; geol.-geog. nauki no.3:99-103 '58.

(MIRA 12:1)

1.Saratevskiy universitet, geologicheskiy fakul'tet, kafedra  
paleontologii.

(Orenburg Province--Geology, Stratigraphic)  
(Bashkiria--Geology, Stratigraphic)

AUTHOR: Ochev, V. G.

SOV/20-122-3-45/57

TITLE: New Data Concerning Triassic Vertebrates of the Orenburg-Ural Region (Novyye dannyye po faune triasovykh pozvonochnykh Orenburgskogo Priural'ya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 3, pp 485 - 488 (USSR)

ABSTRACT: By way of introduction the author sums up the stratigraphy of the Triassic rocks of the Orenburg-Ural region. Because phyllopora remains are seldom found in the lowest Buzulukskaya suite, the Permian-Triassic boundary in this area is poorly established. Apart from the Buzulukskaya suite the Yushatyrskaya is in greatest need of a faunal substantiation of its boundaries. Vertebrates are of the greatest importance for further subdivision of the Triassic sediments. Only two localities of vertebrate findings have hitherto been known. During the years 1955-1957 the author and V. A. Garyainov discovered a number of new fossil localities. A skull of a new type of Triassic labyrinthodont (*Parabenthosuchus gen.nov. uralensis sp.nov.*), along with many decomposed bone splinters, was found in

Card 1/4

New Data Concerning Triassic Vertebrates of  
the Orenburg-Ural Region

SOV/20-122-3-45/57

the upper part of the Blyumental' **ravine** not far from the Blyumental' settlement in the Burtinskiy **rayon** of the **Orenburgskaya oblast'**. Previously the author had discovered a number of bone localities in the Kyzyl-Say **ravine** not far from the village of Andreyevka. Two of these points, which are in the Buzulukskaya suite, were excavated in 1956-57. One of these fossil localities occurs in coarsely-grained, cross-bedded sands which apparently represent a river-bed of delta-alluvium deposit. Here were found fragments and whole bones of labyrinthodonts, pseudosuchia, proterosauria, the teeth of theriodonts, dipnoan fish, and countless fish scales as well as procolophonids. This assemblage is typical of excavation-assemblages of the V.zone (Bentosuchus Zone). However, the second location, which is some 20 m higher in the section, reveals an assemblage which is not characteristic of the V.zone. At this point a skeleton of a very large pseudosuchia was found. In the red loam of the Donguzskaya suite, exposed on the right bank of the Berdyanka River, 1/2 km down stream

Card 2/4

New Data Concerning Triassic Vertebrates of the Orenburg- SOV/20-122-3-.../57  
Ural Region

from the village of Novo-Aleksandrovka, Sol'-Iletskiy rayon in the **oblast** of Orenburg, a dicynodont skeleton was found. In addition a new assemblage of fossils from the locality of the Yushatyrskaya suite (discovered in 1948 by B.P.V'yushkov) was identified. The following were found: Order TEMNOSPONDYLI, superfamily CAPITOSAUROIDEA, family Benthosuchidae, genus Parabenthosuchus (previously mentioned, Fig 1). This form is further advanced than those of the South African Uralocentrodon and Lydekkeriana. The brain case has thicker walls than that of Wetlugosaurus angustifrons Rjab. Family MASTODONSAURIDAE, genus Mastodonsaurus, species M.maximus sp.nov. (Fig 2). It was found in the Sol'-Iletsk rayon near the Bukobay River, **oblast** of Orenburg, Yushatyrskaya suite, VII zone. This is the greatest known species, related to M.giganteus Fraas. Order COTYLOSAURIA, family PROTOCOLOPHONIDAE, genus Tichvinskia Tshud. et Vjush., 1956, species T.burtensis sp.nov. was found in the aforementioned **ravine** Kyzyl-Say. It is related to T.vjatkensis

Card 3/4

New Data Concerning Triassic Vertebrates of the Orenburg- SOV/26-122-3-45/57  
Ural Region

and T.jugensis Tshud. et Vjush (Ref 5). There are 3  
figures and 6 references, 5 of which are Soviet.

ASSOCIATION: Saratovskiy gosudarstvennyy universitet im. N.G.Cherny-  
shevskogo (Saratov State University imeni N.G.Chernyshevskiy)

PRESENTED: May 12, 1958, by D.V.Malivkin, Member, Academy of Sciences,  
USSR

SUBMITTED: May 9, 1958

Card 4/4

3(0)

AUTHOR:

Ochev, V. G.

SCV, 20-123-4-49/53

TITLE:

New Data on Pseudosuchia of the USSR (Novyye dannyye po psevdosukhiyam SSSR)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 4. pp 749-751 (USSR)

ABSTRACT:

The Reptiles, especially the pseudosuchian, play an evermore important role today in Triassic stratigraphic problems. survey of finds (Refs 1,2) as well as a description of pseudosuchian remains is given. In 1956 the author found pseudosuchian bones in the upper part of the Buzulukskaya suite (Burtinskiy area, region of Orenburg). These bones belong to a new family: Garjainidae fam.nov (Order Thecondontia Owen, 1859). The family includes the genus Garjainia gen.nov. with the new species: Garjainia prima sp.nov. (Fig 1). It is a large pseudosuchian with a skull 430 mm across. The general character of the skull indicates that it is similar to the family Proterosuchidae, but differs by a series of characteristics: the teeth are thecodont, palate and interparietale, and the intercentrum of the cervical vertebra is missing. The closest descendents of the proterosuchian may be

Card 1/3

New Data on Pseudosuchian of the USSR

SOV/20-123-4-49/53

Elaphrosuchus Broom (Ref 3) from South Africa and Erythrosuchus Huene (Ref 4). Excavation: village Andreyevka, canyon Kyzylsay, bed T<sub>1</sub><sup>1</sup>, upper part of Zone V of I. A. Yefremov. Further work with the gargainian could solve interesting stratigraphic problems. On the whole, the fauna of the above-mentioned V zone is more advanced than that of the Lystrosaurus zone of South Africa. The V zone thus corresponds to the youngest part of the Lystrosaurus zone, or it at least corresponds to a part of the Procolophon zone (Ref 8). The lower part of the Lystrosaurus zone in the eastern part of European USSR corresponds to the unconformity between the Permian and Triassic. There are 1 figure and 8 references, 4 of which are Soviet.

ASSOCIATION: Saratovskiy gosudarstvennyy universitet im. N. G. Chernyshevskogo (Saratov State University imeni N. G. Chernyshevskiy)

PRESENTED: July 18, 1958, by D. V. Nalivkin, Academician

Card 2/3

COBY, V.G., Cand Geol-in Sci —(diss) "Stratigraphy of Triassic  
deposits of the Greburg Priural'ye according to the fauna of  
vertebrates." Saratov, 1959. 17 pp (Min of Higher Education  
USSR. Saratov State Univ. V.G. Chernyshevskiy), 1959 edition  
(KL,29-59, 126)

-15-

OCHEV, V.G.

Continental interruption between the Paleozoic and  
Mesozoic in the east of the European part of U.S.S.R.  
Izv.vys.ucheb.zav.; geol.i razv. no.3:32-36 My '60.  
(MIRA 13:7)

1. Saratovskiy nauchno-issledovatel'skiy geologicheskii  
institut.  
(Russia--Geology, Stratigraphic)

COHEV, V.G.

Triassic stratigraphy of the Ural Mountain region, based on  
vertebrates. Trudy VNIIGI no.29:35-40 vol. 1 '60.

(MIRA 14:7)

(Ural Mountain region -Paleontology, Stratigraphic)

OCHEV, V.G.

Stratigraphy of the continental Triassic sediments in the eastern  
portion of the European part of the U.S.S.R. Uch.zap. SGU 74:  
131-138 '60. (MIRA 15:7)

(Geology, Stratigraphic)

OCHEV, V.G.

A new thecodont from Triassic deposits in the Orenburg area of the Ural Mountain region. Paleont.zhur. no.1:161-162 '61. (MIRA 14:8)

1. Saratovskiy gosudarstvennyy universitet imeni N.G.Chernyshevskogo.  
(Kyzyl-Say region (Orenburg Province)—Reptiles, Fossil)

OCHEV, V.G.

Climate of the Traissic in the southeastern part of the  
European U.S.S.R. Izv. vys. ucheb. zav.; geol. i razv.  
3 no.6:18-22 Je '61. (MIRA 14:7)

1. Saratovskiy gosudarstvennyy universitet imeni Chernyshevskogo.  
(Paleoclimatology)

OCHEV, V.G.

Finds of the little-known groups of Triassic vertebrates. Izv. vys.ucheb.sav.; geol.i razv. 5 no.9:25-28 S '62. (MIRA 16:1)

1. Saratovskiy gosudarstvennyy universitet im. N.G.Chernyshevskogo.

(Orenburg Province—Vertebrates, Fossil)

GORYAINOV, V.A.; OCHEV, V.G.

Stratigraphy of Triassic sediments in the portion of the Ural  
Mountain region in Orenburg Province. Izv. vys. ucheb. zav.;  
geol. i razv. 7 no.4:16-22 Ap '64. (MIRA 18:3)

1. Saratovskiy gosudarstvennyy universitet.

OCHEV, V.G.; POLUBOTKO, I.V.

"New finds of Ichthyosauria in the northeast of the U.S.S.R.

Izv. vys. ucheb. zav.; geol. i razv. 7 no.7:50-55 J1 '64  
(MIRA 18:2)

1. Saratovskiy gosudarstvennyy universitet i Severo Vostochnoye  
geologicheskoye upravleniye.

OCHEV, V.G.; SHISHKIN, M.A.; GARYAINOV, V.A.; TVERDOKHLEBOV, V.P.

New data on the stratigraphic division of the Triassic according to vertebrates in the Ural Mountain portion of Orenburg Province. Dokl. AN SSSR 158 no.2:363-365 S '64. (MIRA 17:10)

1. Nauchno-issledovatel'skiy institut geologii pri Saratovskom gosudarstvennom universitete im. N.G.Chernyshevskogo i Paleontologicheskij institut AN SSSR. Predstavleno akademikom Yu.A.Orlovym.

OCHIANA, Gh., ing.

Through mechanization to higher productivity. Constr Buc  
15 no.697:2 18 My '63.

1. Din D.G.I.C.M.F.S. - M.I.C.

OCHIANA, M.

The role of Scientific Association of Engineers and Technicians in introduction of new technique in the wood industry. p. 435.

(INDUSTRIA LEMNULUI. RUMANIA. Vol. 5. no. 10, Oct. 1956)

SO: Monthly List of East European Accessions (EEAL) Lc, Vol. 6, no. 7, July 1957. Uncl.

STATICESCU, P., ing.; OLTEANU, Gh., dr.; MATEI, A., ing.; MUNTEANU, E.  
ing.; LUTSCH, M., ing.; POPA, I., ing.; RACZ, Z., ing.;  
COSMA, I., ing.; LENGYEL, V., ing.; LUNGU, C., ing.;  
SINGER, M., ing.; CRETU, I., ing.; GRIGORAS, m., ing.;  
CRACIUNESCU, C., ing.; COLIS, I., ing.; BACOS, M., ing.;  
ALEXANDRESCU, T., ing.; HERZOVAN, I., ing.; TOARNICZSKI, E., ing.;  
OCHIANA, S., ing.; MOCANU, E., ing.

Results obtained with different varieties in sugar-beet  
growing. Ind alim 14 no.9:342-348 S'63.

1. Fabrica de zahar Giurgiu (for Matei, Munteanu).
2. Fabrica de zahar Bod (for Lutsch, Popa).
3. Fabrica de zahar Tg. Mures (for Racz, Cosma, Lengyel).
4. Fabrica de zahar Roman (for Lungu, Singer).
5. Fabrica de zahar Bucecea (for Cretu, Grigoras).
6. Fabrica de zahar Oltenia (for Craciunescu, Colis).
7. Fabrica de zahar Banat (for Bacos).
8. Fabrica de zahar Arad (for Alexandrescu, Erzovan).
9. Fabrica de zahar Ludus (for Toarniczski, Ochiana).
10. Fabrica de zahar Sascut (for Mocanu).

OCHIAURI, D.A.

Note on the distribution of *Adoxa moschatellina* L. in the Caucasus.  
Zam. po sist. i geog. rast. no.21:39-42 '59.

(MIRA 13:8)

(Georgia--Moschatel)

CONTIARI, D.A.

New species of the genus *Marenzelleria* from the Caucasus. *Ann. Mag. Nat. Hist. Geol. Ser.*  
*pa. sist. 1. geog. rast. no.23:63-65 1953.*

New species of saxifrages from the Caucasus. *Ibid. 1954-55*  
*1954-55*

OCHIAURI, Dedika Alekseyevna

[Study of the flora of Pshav-Khevsureti] [K izucheniiu  
flory Pshav-Khevsurcti. Tbilisi, Metsniereba] 1965. 97 p.  
[In Georgian] (MIRA 18:10)

OCHILOVA, M.

Microflora decomposing humates in Sierozem soils. *Izv. AN SSSR.*  
Ser. biol. no.2:299-303 Mr-Apr '61. (MIRA 14:3)

1. Microbiological Institute, Academy of Sciences of the U.S.S.R.,  
Mowcow.

(UZBEKISTAN--SOIL MICRO-ORGANISMS)  
(SIEROZEM SOILS) (HUMUS)

OCHILOVA, M.

Decomposition of humic acids of Sierozem soils of Uzbekistan caused by pure cultures of humus decomposing micro-organisms. *Izv. AN SSSR. Ser. biol. no.4:649-652 J1-Ag '61.* (MIRA 14:9)

1. Institut mikrobiologii AN SSSR.  
(UZBEKISTAN--SIEROZEM SOILS)  
(SOIL MICRO-ORGANISMS)

HALIKOWSKI, Boguslaw; OCHIMOWSKA-DILAJ, Maria; FOLTYN, Halina; KUROWSKA-TAYLOR, Aleksandra

Symptomatology and clinical variants of hypercalcemia in children.  
Pediat. pol. 37 no.8:805-815 Ag '62.

1. Z II Kliniki Chorob Dzieci AM w Gdansku Kierownik: doc. dr med.  
B. Halikowski.

(HYPERCALCEMIA)

FRONESCU, E., dr.; OCHINDUC, S., dr.

Considerations on a "renal form" of plasmocytoma. Med. intern.,  
Bucur 12 no.11:1687-1691 N '60.

1. Lucrare efectuata in Clinica a V-a medicala, Spitalul "V.Roaita"  
I.M.F. Bucuresti, director: prof. T.Spirchez.  
(MYELOMA, PLASMA CELL case reports)  
(ALBUMINURIA etiology)

Uchinskaya, G.K.

GRAYEVSKIY, Ye.Ya.; OCHINSKAYA, G.K.; SHAAK, M.V.

Nature of the photodynamic process. Zh. obsh. biol., Moskva 13 no.  
3:211-231 May-June 1952. (CML 22:4)

1. Laboratory of Experimental and Pathological Morphology of the  
Central Roentgenological, Radiological, and Cancer Institute of the  
Ministry of Public Health USSR.

Effect of oxygen on the harmful action of various ionizing radiations. B. Ya. Graevskij and G. K. Ochinskaya. Doklady Akad. Nauk S.S.S.R. 89, 744 (1953). ~~Effect of oxygen on the harmful action of various ionizing radiations. B. Ya. Graevskij and G. K. Ochinskaya. Doklady Akad. Nauk S.S.S.R. 89, 744 (1953).~~ *Escherichia coli* were irradiated at 15° with x-,  $\beta$ -, or  $\gamma$ -radiation *in vacuo* or in contact with O-air. With  $\beta$ -radiation no significant difference in lethal action of radiation in the presence or absence of O was observed. With  $\gamma$ -radiation the lethal action of radiation was decreased *in vacuo* by a factor of about 2.3. With x-radiation the results were similar and the survival factor was 2.0. The results are correlated with those of Ailsopp (C.A. 38, 4505!).

G. M. Kosolapoff

OCHINSKAYA, G.K.

Effect of various forms of ionizing radiations on *Paramecium*  
*caudatum*. *Sitologia* 1 no.4:393-402 J1-Ag '59.

(MIRA 12:10)

1. Otdeleniye eksperimental'noy morfologii TSentral'nogo  
nauchno-issledovatel'skogo instituta meditsinskoy radiologii  
Ministerstva zdravookhraneniya SSSR, Leningrad.

(RADIATION--PHYSIOLOGICAL EFFECT) (PARAMECIUM)

OCHINSKAYA, G.K.

Difference in the biological effect on mammals of roentgen rays and gamma rays of radioactive cobalt. Med.rad. 4 no.11:29-33 N '59.

(MIRA 13:2)

1. Iz otdela eksperimental'noy morfologii (zaveduyushchiy - prof. G.S. Strelin) Tsentral'nogo nauchno-issledovatel'skogo instituta Ministerstva zdravookhraneniya SSSR.

(COBALT radioactive)

(RADIATION EFFECTS experimental)

BYCHKOVSKAYA, I.B.; QCHINSKAYA, G.K.

Protective effect of hypoxia at different radiation dosages.  
Biofizika 5 no. 4:468-478 '60. (MIRA 13:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut meditsinskoy  
radiologii Ministerstva zdravookhraneniya SSSR, Leningrad.  
(RADIATION PROTECTION) (ANOXEMIA)

FUNSHTEYN, L.V.; OCHINSKAYA, G.K.; SHCHERBAN', E.I.

Morphological changes in the internal organs of mice following a single high dose of X irradiation. Radiobiologiya 1 no.3:440-445 '61. (MIRA 14:10)

1. Tsentral'nyy nauchno-issledovatel'skiy institut meditsinskoy radiologii, Leningrad.  
(X RAYS--PHYSIOLOGICAL EFFECT)

ACCESSION NR: AP4015086

s/0205/64/004/001/0063/0066

AUTHOR: Bychkovskaya, I. B.; Ochinskaya, G. K.

TITLE: A study of the "oxygen effect" during different radiation dose rates

SOURCE: Radiobiologiya, v. 4, no. 1, 1964, 63-66

TOPIC TAGS: Calandria granaria, oxygen effect, determination, oxygen concentration, radiation dose rate, survivability, radiation damage

ABSTRACT: This study investigates whether the extent of oxygen effect during different radiation dose rates can be determined by quantitative changes in the ratio between radiation dose rate and the oxygen concentration of the medium. Calandria granaria beetles were selected for investigation because of their capacity to endure complete absence of oxygen for long periods of time. In a preliminary experimental series the beetles were X-irradiated with different radiation doses at dose rates of 500 and 50 r/min and with oxygen concentrations ranging from 0 to 21% to find the "isobiological" radiation dose for both dose rates. This dose was established at 7 kr on the basis of survival and average life span indices, and two experimental series  
Card1/3

ACCESSION NR: AP4015086

were conducted to compare oxygen effects for this dose at 500 and 50 r/min. In the first series, the 500 r/min dose rate (radical concentration per unit of time) remained constant and the oxygen concentration (0-21%) changed. In the second series the oxygen concentration (3.8%) remained constant and dose rates changed. Findings indicate that the dependence of radiation damage on oxygen concentration is characterized by an S-shaped curve. Radiation damage increases with certain oxygen concentrations and then an "oxygen ceiling" is reached when further oxygen concentration increase is not reflected by radiation effect. Within a certain oxygen concentration range, radiation damage depends on the slightest change in oxygen concentration but does not depend on dose rate change. In this study the extent of oxygen effect during different dose rates cannot be determined by simple quantitative ratios between radiation dose rate and oxygen concentration, but they may be valid in determining oxygen effect for high dose rates, which were not investigated. Orig. art. has: 3 tables, 1 figure.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut  
meditsinskoy radiologii MZ SSSR (Central Scientific-Research Institute  
of Medical Radiology, MZ SSSR)  
Card 2/3

ACCESSION NR: AP4015086

SUBMITTED: 19Feb63

DATE ACQ: 12Mar64

ENCL: 00

SUB CODE: LS

NO REF SOV: 002

OTHER: 001

Card 3/3

ACCESSION NR: AP4027967

S/0205/64/004/002/0203/0209

AUTHOR: Bychkovskaya, I. B.; Ochinskaya, G. K.

TITLE: Analysis of hypoxia radioprotective action dependence on radiation dose

SOURCE: Radiobiologiya, v. 4, no. 2, 1964, 203-209

TOPIC TAGS: hypoxia, radioprotective action, 1 to 150 kr X-irradiation dose, granary weevil (*Calandra granaria*), average life span, hypoxia radioprotective action, radiation dose dependence, effective radiation dose reduction

ABSTRACT: Granary weevils (*Calandra granaria*) were X-irradiated (200 kv, 20 ma, filter 0.5 mm Al + Cu 0.21 mm, 500 r/min) with 48 different single doses ranging from 1 to 150 kr to determine the dependence of hypoxia radioprotective action on radiation dose. Experimental weevils were X-irradiated in a 2% oxygen concentration and control weevils were irradiated under normal conditions of 20 to 21% oxygen. Survival and average life span were determined every 3 days for a period of 50 days after irradiation. Findings show that the radiation doses can be divided into 3 groups on the basis of  
Card 1/2

ACCESSION NR: AP4027967

average life span: Group I (8 to 35 kr, 20 days), Group II (40 to 68 kr, 13 days), and Group III (74 to 150 kr, 9 days). Radioprotective action of hypoxia is present for the smallest doses of each group: 8 to 13 kr in Group I, 40 to 50 kr in Group II, and 74 to 80 kr in Group III. It is absent for larger doses: 14 to 35 kr in Group I, 55 to 68 kr in Group II, and 85 to 150 kr in Group III. The divergence between experimental and control curves for absolutely lethal doses (8 to 150 kr) actually characterizes the step dependence of radiation effect on dose more than the radioprotective action of hypoxia. The radioprotective action of hypoxia is basically a reduction of effective radiation dose, but the reduction value decreases less with massive radiation doses. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut meditsinskoy radiologii MZ SSSR, Leningrad (Central Scientific-Research Institute of Medical Radiology MZ SSSR)

SUBMITTED: 19Feb63

ENCL: 00

SUB CODE: LS

NR REF SOV: 003

OTHER: 001

Card 2/2

BYCHKOVSKAYA, I.B.; OCHINSKAYA, G.K.

Intensity of the oxygen effect following X-ray and gamma irradiation  
of billbugs. Radiobiologia 4 no.6:928-929 '64. (MIRA 18:7)

1. Tsentral'nyy nauchno-issledovatel'skiy rentgeno-radiologicheskii  
institut Ministerstva zdravookhraneniya SSSR, Leningrad.

L 772-66  
ACC NR: AP5025922

SOURCE CODE: UR/0205/65/005/005/0700/0702

AUTHOR: Bychkovskaya, I. B.; Ochinskaya, G. K.

ORG: Central Scientific Research Roentgenoradiological Institute MZ  
SSSR, Leningrad (Tsentral'nyy nauchno-issledovatel'skiy rentgeno-  
radiologicheskii institut MZ SSSR)

47  
B

TITLE: Absence of "oxygen aftereffect" in granary weevils under  
hibernation conditions induced by lowering of temperature

SOURCE: Radiobiologiya, v. 5, no. 5, 1965, 700-702

TOPIC TAGS: experiment animal, irradiation effect, irradiation damage,  
hypothermia, hypoxia, oxygen

ABSTRACT: An increasing number of recent studies show that the  
presence of oxygen following irradiation of subjects (with a low water  
content) at low temperatures (3 to 5°) produces a harmful aftereffect.  
In the present study oxygen aftereffect was investigated in granary  
weevils (Calandra granaria) irradiated in a state of hibernation under  
different conditions of hypoxia. Hibernation was induced by lowering  
of temperature to 3 to 5° for 20 to 24 hrs before irradiation and for  
30 min to 12 days following irradiation. The weevils were X-irradiated  
(RUM-3 unit, 200 kv, 20 ma, 500 r/min) in special vacuum test tubes

Card 1/2

UDC: 577.391:632.7

L 7772-66

ACC NR: AP5025922

with 5 to 10 kr doses under the following conditions of hypoxia: hypoxia at moment of irradiation, hypoxia at moment of awakening from hibernation, hypoxia from moment following irradiation to moment to moment of awakening from hibernation, and without hypoxia (control). Oxygen aftereffect was absent in all experimental weevils irradiated at low temperatures. The radioprotective effect of hypoxia was demonstrated in all experimental series with hypoxia present at the moment of irradiation (7, 8, 9, and 10 kr) followed by removal to room temperature 30 min to 12 days later. However, the radioprotective effect was absent with hypoxia produced at the moment weevils were awakened from hibernation and also with more prolonged periods (30 min, 2, 3, and 6 days) of hypoxia following irradiation. These data provide no basis for assuming that oxygen aftereffect is the result of prolonged contact of an irradiated subject with oxygen. The absence of any oxygen aftereffect in these experiments, contrary to literature findings under similar conditions, appears to indicate that in addition to external factors the special characteristics of the subject itself determine oxygen aftereffect. Orig. art. has: 1 table.

SUB CODE: 06/ SUBM DATE: 24Aug63/ ORIG REF: 004/ OTH REF: 007

*MLC*  
Card 2/2

OCHINSKAYA, G.K.; BYCHKOVSKAYA, I.B.

Existence of a system in the response of biological objects to irradiation; an analysis of data obtained on Paramecium caudatum. Dokl. AN SSSR 1964 n. 2:471-473' Ju '65.

(MIRA 18:2)

1. Tsentral'nyy nauchno-issledovatel'skiy rentgeno-radiologicheskiy institut. Submitted May 11, 1964.

OCHINSKAYA, G. V

69

PHASE I BOOK EXPLOITATION

SOV/5435

Kiselev, P. N., Professor, G. A. Gusterin, and A. I. Strashinin, Eds.

Voprosy radiobiologii. t. III: Sbornik trudov, posvyashchenny 60-letiyu so dnya rozhdeniya Professora M. N. Pobedinskogo (Problems in Radiation Biology. v. 3: A Collection of Works Dedicated to the Sixtieth Birthday of Professor M[ikhail] N[ikolayevich] Pobedinskiy [Doctor of Medicine]) Leningrad. Tsentr. n-issl. in-t med. radiologii M-va zdravookhrananiya SSSR, 1960. 422 p. 1,500 copies printed.

Tech. Ed.: P. S. Peleshuk.

PURPOSE: This collection of articles is intended for radiobiologists.

COVERAGE: The book contains 49 articles dealing with pathogenesis, prophylaxis, and therapy of radiation diseases. Individual articles describe investigations of the biological effects of radiation carried out by workers of the Central Scientific Research Institute for Medical Radiology of the Ministry of Public Health, USSR. [Tsentral'nyy nauchno-issledovatel'skiy institut meditsinskoy radiologii Ministerstva zdravookhraneniya SSSR] during 1958-59. The following

Card 1/10

≠ 64

Problems in Radiation Biology (Cont.)

807/5435

topics are covered: various aspects of primary effects of radiation; the course of some metabolic processes in animals subjected to ionizing radiation; reactions in irradiated organisms; morphologic changes in radiation disease; and reparation and regeneration of tissues injured by irradiation. Some articles give attention to the effectiveness of experimental medical treatments. No personalities are mentioned. References accompany almost all of the articles.

TABLE OF CONTENTS:

Foreword	3
Gusterin, G. A., and A. I. Strashinin. Professor Mikhail Nikolayevich Pobodinskiy (Commemorating his Sixtieth Birthday)	5
Lebedinskiy, A. V. [Member, Academy of Medical Sciences USSR], N. I. Arlashchenko, and V. M. Mastryukova. On the Mechanism of Trophic Disturbances Due to Ionizing Radiation	11
Zedgenidze, G. A., [Member, Academy of Medical Sciences USSR], Ye. A. Zherbin, K. V. Ivanov, and P. R. Vaynshteyn. Hormonal Activity of the Adrenal Cortex in Acute Radiation Sickness and the Effect of Desoxy-corticosterone Acetate on the Disease	17

Card 2/10

Problems in Radiation Biology (Cont.)

507/5455

- 7
- Sipovskiy, P. V., and A. V. Kantin. Morphologic Healing Characteristics of the Amputational Bone Stump of Rabbits During Radiation Sickness and After Recovery 248
- Funshteyn, L. V. On Morphogenesis in Experimental Acute Radiation Sickness 256
- Pedercov, Yu. A. Effect of Fractional Whole-Body X-Ray Irradiation of Hard Dental Tissue in White Rats 265
- Funshteyn, L. V., and E. I. Shcherban'. On the Phagocytic Capability of Some Segments of the Reticuloendothelial System Following Whole-Body X-Ray Irradiation of White Mice 272
- Ochinskaya, G. V., and L. V. Funshteyn. Morphologic Changes in Internal Organs of Pregnant Animals Subjected to Whole-Body Irradiation 281
- Kholin, V. V. Comparative Data on Injury to the Spleen in Acute Radiation Disease, Depending on Age of the Animals 288

Card 7/10

FUNSHTEYN, Lev Vladimirovich; VASIL'YEVA, Ye.I.; GRACHEVA, N.D.;  
OCHINSKAYA, G.V.; PROTAS, L.R. [deceased]; RABINOVICH, R.M.;  
SHCHERBAN', E.I.; SIPOVSKIY, P.V., red.; RULEVA, M.S., tekhn.  
red.

[Atlas of the pathological anatomy of acute experimental radiation sickness] Atlas patologicheskoi anatomii ostroi luchevoi bolezni v eksperimente. Leningrad, Medgiz, 1961. 216 p.  
(MIRA 15:2)

(RADIATION SICKNESS) (ANATOMY, PATHOLOGICAL--ATLASES)

OCHINSKIY, M.K.

Devices for checking lever clamps and microscrews in  
micrometers over 200 mm. Izv.tekh. no.4:7-8 Ap '60.  
(MIRA 13:8)

(Micrometer—Testing)

OCHINSKIY, N.K.

Attachment to a vertical optical indicator. Izv. tekhn. no. 11:18-19  
N '60. (MIRA 13:11)

(Optical instruments)

SOV/97-59-3-11/15

AUTHORS: ~~Gohinskiy, V. I.~~, Architect, Sidorov, A. S. Engineer and Shul'ts, E. E. Engineer

TITLE: New Truss Construction

PERIODICAL: Beton i zhelezobeton, 1959, Nr 3, pp 136-137 (USSR)

ABSTRACT: The truss construction described and illustrated in this article is made up of three separate units (Figs 1 and 2) which are reinforced by welded reinforcement skeleton consisting of three 4 mm diameter longitudinal bars and cross-reinforcement of 3 mm diameter bars spaced 25-30 cm apart. In the bottom frame two 10 mm diameter rods are left protruding for later fixing of the ceiling. Individual parts of the truss are joined together by cement grout mark 100. The trusses are cast on concreting yard KPP of the Sochispetsstroy. The frames can be placed in position without cranes as the heaviest unit weighs only 60 kg. The table on p 137 gives consumption of concrete and steel for trusses used for a house with 28 apartments. In comparison with

Card 1/2

SOV/97-59-3-11/15

New Truss Construction

steel trusses they require only one-third of the volume of concrete and one-sixth of the weight of steel. The trusses are cast in steel forms on vibrating tables. There are 2 figures and 1 table.

Card 2/2

KAZARYAN, V.A.; OCHINYAN, S.A.

Ensilage of potato tubers and leaves. Izv.AN Arm.SSR.Biol.i  
sel'khoz.nauki. 5 no.1:105-108 '52. (MLRA 9:8)  
(Stepanavan District--Ensilage) (Potatoes)

OCHINYAN, S.A. (g. Stepanavan)

Fall planting of potatoes in Stepanavan District of the Armenian  
S.S.R. Preliminary report. Izv.AN Arm.SSR.Biol.i sel'khoz.nauki 7  
no.7:103-106 J1 '54. (MLRA 9:8)  
(Stepanavan District--Potatoes)

VELEV, D.S.,k.t.n.; OCHIPALSKI, A.N., inzh.

Friction coefficient and hydraulic resistance of glass wool. Tekhnika  
Bulg 11 no.1:39-40 '62

OCHIROV, Ts. O., Cand Geol-Min Sci -- (diss) "Geological-  
lithologic characteristics of carboniferous deposits of  
the Gusinozerskiy coal-bearing <sup>region</sup> ~~region~~." Len, 1957. 20 pp  
(Min of Higher Education USSR, Len Orders of Lenin and Labor  
Red Banner Mining Inst im G. V. Plekhanov), 100 copies (KL,  
52-57, 104)

- 21 -

*Ochirov, Ts.O.*

20-5-59/54

AUTHOR: Ochirov, Ts.O.

TITLE: The Facial Structure and a Structural Scheme of the Coal-Bearing Mass of Gusinoye-Ozero (Fatsial'noye **stroyeniye** i skhema raschleneniya Gusinozerskoy uglenosnoy tolshchi)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 115, Nr 5, pp. 991 - 994 (USSR)

ABSTRACT: This coal basin is situated 120 km south of Ulan-Ude in a district of Buryat Mongolia. Geomorphologically it forms a depression between mountains. It is one of those shallows which form a part of the vast Gusino-Uda depression. Structurally it is a large syncline extending from North to East. The coal-bearing sediments belong to the middle and upper Jurassic as well as to the lower cretaceous formation. In the Northwest they rest upon a substratum of an upper paleozoic (or low mesozoic) porphyrite complex, and, to a small extent, of red paleozoic granite. After many years of work, N.A. Florensov succeeded in setting up a scheme of the geological structure of the coal-bearing masses of this district, especially that of Gusinoye-Ozero (a mesozoic coal-bearing region in Transbaikalia.) It deviates considerably from pre-

Card 1/3

20-5-39/54

The Facial Structure and a Structural Scheme of the Coal-Bearing Mass of Gusinoye  
-Ozero

vious ones. The scheme worked out by Florensov was, on the whole, confirmed by the lithological-facial investigations carried out by the author; the main subdivisions carried out by him were confirmed by the author, and the cross sections of some of the research regions were compared. Some rules of the facial structure of the mass were found and were used as a basis for the structural scheme set up. The entire mass can be subdivided into 3 suites according to the degree of saturation by sediments of the bog facies, i.e. according to the amount of coal they contain: 1.) the lower (500 - 640 m) which has no coal; the middle suite (900 - 1110 m) carrying coal, the upper one (360 - 400) carrying no coal. The author further subdivides the lower suite lithologically into two sub-suites, and the middle one into 3. Agreement with the denominations used by Florensov is mentioned. Furthermore, the suites and sub-suites are described in detail. The structural scheme suggested for the coal-bearing mass makes it possible to draw practical conclusions. Especially, the occurrence of coal deposits also in lower horizons is possible. Several promising regions are expressly mentioned. There are 1 figure and Slavic references.

Card 2/3

20-5-39/54

The Facial Structure and a Structural Scheme of the Coal-Bearing Mass of Gusino-Ozero

ASSOCIATION: Laboratory for Coal Geology, AN USSR, Leningrad  
(Laboratoriya geologii ~~uglya~~ Akademii nauk SSSR, Leningrad)

PRESENTED BY: D.V. Nalivkin, Academician, March 1, 1957

SUBMITTED: February 28, 1957

AVAILABLE: Library of Congress

Card 3/3

OCHIROV, TS.O.

Lithological composition and conditions of accumulation of  
coal-bearing formations in the Gusinozersk coal region.  
Trudy lab.geol.ucl. no.8:215-229 '58. (MIRA 11:12)  
(Gusinozersk region--Coal geology)

OCHIROV, TS.O.

Coal resources of the Lake Gusinoye region. Krat. soob. BKNII  
no.1:19-24 '59. (MIRA 14:9)  
(Gusinoye Lake region--Coal geology)

OCHIROV, TS.O.; DVORKIN-SAMARSKIY, V.A.; DMITRIYEV, G.A.

Role of Russian geologists in the geological study of Buryat-  
Mongolia. Trudy BKNII no.1:94-99 '59. (MIRA 14:8)  
(Buryat-Mongolia--Geological surveys)

OCHIROV, TS.O.; DVORKIN-SAMARSKIY, V.A.

Problems of geological studies in the Buryat A.S.S.R. Trudy BKHII  
no.2:3-8 '60. (MIRA 14:10)  
(Buryat-Mongolia--Geology)

OCHIROV, TS.O.

Lithology of Mesozoic sediments in the Tunguy Depresaion. Trudy  
BKNII no.2:9-18 '60. (MIRA 14:10)  
(Tunguy Valley--Geology, Stratigraphic)  
(Rocks, Sedimentary)

KONIVETS, V.I.; OCHIROV, TS.O.

Transbaikalian brown coal is an additional raw material in the  
by-product coking industry. Trudy BKNII no.2:114-121 '60.  
(MIRA 14:10)

(Transbaikalia--Lignite) (Coke industry)

OCHIROV, TS.O.

Fault tectonics in central Buryatia. Trudy BKNII no.7:3-12 '61.  
(MIRA 16:4)

(Buryat-Mongolia--Faults (Geology))

OCHIROV, TS.O.; DVORKIN-SAMARSKIY, V.A.; TUGOVIK, G.I.

Geological study of the Buryat A.S.S.R. Kraeved. sbor. no.7:  
12-25 '62. (MIRA 16:8)  
(Buryat A.S.S.R.—Geological research)

OCHIROV, TS.O.

Structural-facies and stratigraphic characteristics of continental  
sediments in the Gusinozersk Depression. Trudy BKNII no.7:36-43  
'61. (MIRA 16:4)

(Gusinozersk Depression—Geology)

OCHIROV, TS.O.

Distribution of heavy minerals in Mesozoic terrigenous sediments  
of the Gusinozersk Depression. Krat.soob. EKNII no.3:19-22  
'62, (MIRA 16:5)  
(Gusinozersk Depression--Minerals)

SECRET

1. The following information was obtained from a source who has provided reliable information in the past.

2. The source has provided information that is of a confidential nature and is being provided to you for your information only.

3. This information is being provided to you for your information only and is not to be disseminated to other personnel.

4. The source has provided information that is of a confidential nature and is being provided to you for your information only.

5. This information is being provided to you for your information only and is not to be disseminated to other personnel.

UCHIROV, TS.G.

Mineralogical Society of the Soviet Union and its role in  
the study of mineral resources. Study BFNII no. 9:150-163 1964  
(MIRA 18:3)

OCHIROV, TS.O.; SILAKOV, V.N.

Conference on the metallurgy and utilization of mineral resources  
in Buryat A.S.S.R. Geol. i geofiz. no.12:117-118 '62. (MIRA 16:3)  
(Buryat A.S.S.R.—Ore deposits)

BULNAYEV, K.B.; GCHINOV, TS.O.

Endogenetic mineralization and the igneous activity of the  
zones of Mesozoic faults in western Transbaikalia. Zap. Vses.  
min. ob-va 93 no.5:606-612 '64.

(11.1.1964)

ОСЧИКОВ, Тsybik Ochirovich; ДВОРКИН-САМАРСКИЙ, В.А., spets. red.;  
ОГИЙЕНКО, С.И., red.

[Geology of the Gusinoye-Ivolginsk part of the Buryat  
A.S.S.R.] Geologiya Gusino-Ivolginskoi chasti Buriatii.  
Ulan-Ude, Buriatskoe knizhnoe izd-vo, 1964. 154 p.  
(MIRA 17:8)

QCHIROV, Tsybak Oshirovna, KUMAYEV, Kizirba B. and KURCHIKOV,  
Vladimir Stepanovich, PUFONAHAYEV, Vladimir Ivanovich,  
TSYRENDORZHAYEV, Igor Tsyntov and KOSYGIN, Yu. A.  
otv. red..

[Development of medicinal structures in western Trans-  
baikalia] Razvitiye meditsinskikh struktur Zabajkalia  
Zabaykalia. Ulan-Ude: Buria-ka-ka zurno izdatel', 1965.  
207 p. (MIRA 13412)

1. Chief correspondent of AN SSSR (P. Kopylov)

OCHIROV, TS.O.

Tectonics of Buryatia. Geotektonika no.1:57-67 Ja-P '66.  
(MIRA 19:1)

1. Buryatskiy kompleksnyy institut Sibirskogo otdeleniya  
AN SSSR.

OCHIROV, Yu.D.; POCHKUNIN, D.I.

Natural tularemia focus in Chita Province. Zhur. mikrobiol. epid.  
i immun. 32 no.5:66-67 My '61. (MIRA 14:6)

1. Iz Chitinskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.  
(CHITA PROVINCE--TULAREMIA)

KOZLOV, M.P.; OCHIRVAAN, G.

Scientific studies on infection pathology in the Mongolian  
Peoples Republic; a review. Zhur. mikrobiol., epid. i immun.  
42 no.1:82-85 Ja '65. (MIRA 18:6)

Country : USSR  
Category : Cultivated Plants. Cereals. Leguminous Plants.  
Tropical Cereals. M

Abs Jour : RZhBiol., No 6, 1959, No 24839

Author : Ochiryn Badarch Luvsan  
Inst : Moscow Agricultural Academy imeni K. A.  
Timiryazev.

Title : The Effect of Organic and Mineral Fertilizers  
on the Corn Harvest in the Chestnut Soil of the  
Central Part of Khangay Zone in MNP.

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazeva,  
1958, vyp. 34, 73-79

Abstract : Experiments were conducted in 1956-1957 by the  
Dzun-Karyn Experimental Station on chestnut  
soils (pH, 7.6-8.3), under conditions typical  
for the northern part of MNP. The corn varie-  
ties, Lenin Gorkiy No. 4 and Minnesota respond  
readily to nitrogen and phosphorus fertilizers.

Card : 1/2

42

Country : USSR  
Category : Cultivated Plants. Cereals. Leguminous Plants. M  
Tropical Cereals.

Abs Jour : RZhBiol., No 6, 1959, No 24839

Author :  
Inst :  
Title :

Orig Pub :

Abstract : The largest harvest (an increment of 48.4 c/ha)  
was obtained by the introduction of an organic  
mineral mixtures in small doses into holes. --  
N. Ya. Vorontsova

Card : 2/2

RUMANIA / Forestry. Forest Cultures.

K

Abs Jour: Ref Zhur-Biol., No 7, 1958, 29583.

Author : Oohkai, S., Klonadu, A.

Inst : Not given.

Title : The Selection of Black Poplar Hybrids.  
(Otbor chernykh gibridnykh topoley).

Orig Pub: Rev. padurilor, 1957, 71, No 5, 291-294.

Abstract: Indication is given of the necessity of registering all poplars growing in Rumania, of making experimental cultures, of separating out the best clones and obtaining improved black poplar hybrids.

Card 1/1

2

80175  
S/111/60/000/04/02/003  
B022/B008

6.4800

AUTHORS: Shumlyanskiy, I. I., Docent, Gusarov, Yu. D., Chief Engineer,  
Ochkalenko, N. A., Engineer

TITLE: Spurious Radiation in Shortwave Transmitters Ⓟ

PERIODICAL: Vestnik svyazi, 1960, No. 4, pp. 13 - 15

TEXT: A short classification is given here of spurious radiations in short-wave transmitters which are divided into parasitic oscillations, combination frequencies in the balanced modulator of the exciter, combination frequencies in the transmitter at the mutual interference of the working frequency with the two mentioned frequencies, and multiple harmonic frequencies. The methods of frequency control are discussed, with the methods and systems based on 1) the parametric or quartz control, 2) the direct interpolation of the frequency (Fig. 1), and 3) the indirect interpolation of the frequency being explained, and their mode of operation described. The increase in selectivity of the channel by using additional circuits, and the increase in filtration of the two generators as well as the improvement in linearity of the balanced modulator are mentioned as methods of weakening the combination frequencies, and the increase

4

Card 1/2

Spurious Radiation in Shortwave Transmitters

80175  
S/111/60/000/04/02/003  
3022/B008

in selectivity of the channel by limiting the amplitude under overvoltage conditions is finally described as the best method. Various circuit diagrams (Figs. 6-9) are recommended and described in detail for the purpose mentioned. Getsman, Engineer, Vidgol'ts, Engineer, L. P. Tsvetova, Engineer, and A. A. Perederiyenko, Engineer, are mentioned. There are 9 figures.

ASSOCIATION: Odesskiy elektrotekhnicheskiy institut svyazi (Odessa Electro-technical Institute for Communications) Shumlyanskiy, I. I., Docent, Odesskiy radiotsentr (Odessa Radio Center) Gusarov, Yu. D., Chief Engineer, Ochkalenko, N. A., Engineer

Card 2/2

OCHKAS, F.P.

Using a perfol film covering for hotbeds. Kons. i ov. prom. 14  
no.7:24 J1 '59. (MIA 12:9)

1. Khersonskiy oporny punkt.  
(Hotbeds)

SMIRNOVA, V.F., inzh.; ZOTOV, V.L., inzh.; Prinsipalni uchastiye: BELYAYEV,  
N.N.; OCHKASOVA, Z.P., inzh.

Coating of headwear with a nap finishing by means of the  
electrostatic method. Nauch.-issl. trudy TSNIIShersti  
no.17:124-126 '62. (MIRA 17:12)

1. Rukovoditel' laboratorii avtomatizatsii TSentral'nogo  
nauchno-issledovatel'skogo instituta sherstyanoy promyshlennosti  
(for Belyayev).

OCHKIN, A.

In foreign countries. Mias. ind. SSSR 33 no.4:59-61 '62.  
(MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy  
promyshlennosti.



OCHKIN, I. V.

SATTAR-ZADE, I.S., OCHKIN, A.V., AND FROST, A.V.

"Transformation of Organic Compounds Over Aluminosilicate Catalysts. Report 2"  
Vestnik Moskovskogo Universiteta (Seriya Fiziko-matematicheskikh i Yestestvennykh Nauk  
no. 6), no. 9, 1949

OCHKIN, A.V.  
Andrey Vladimirovich

✓ Kinetics and reaction mechanism for catalytic cracking  
 on active aluminosilicates. A. V. Ochkina and A. V. Chikhen.  
 Problemy Kinetiki i Katalizi, Akad. Nauk S.S.S.R. 6,  
 Geterogenyi Kataliz, 205-72(1949). The types of cata-  
 lytic reactions which can be done with the help of aluminosilicates are reviewed. For the catalytic cracking and disproportionation of H<sub>2</sub>, a theoretical derivation leads to a linear relation between  $\ln(1/(1-\gamma))$  and  $\ln v$ , where  $v$  is the vol. of the reactants entering the reaction zone, and  $\gamma$  is the degree of chem. transformation. Exptl. data were in agreement with this relation. For the case of H<sub>2</sub> disproportionation, it was assumed that the adsorption of the light gaseous reaction products can be neglected and that the alkanes are formed from olefins by hydrogenation of the double bonds by a transfer of H from the tars and coke which form on the catalyst. Andrew Dravnick

*Handwritten signature*

*Handwritten initials*

MALIN, K.M., doktor tekhnicheskikh nauk, professor, laureat Stalinskoy premii,;  
OCHKIN, A.V., inzhener.

Soda. Nauka i zhizn' 20 no.4:10-12 Ap '53.

(MLBA 6:5)  
(Soda industry)

OCHKIN, A.V.

Aleksandr Mikhailovich Butlerov. Nauka i shizn' 20 no.9:39-40 S '53.  
(MLA 6:11)  
(Butlerov, Aleksandr Mikhailovich, 1828-1886)

Сопров. 47

3407 OCHKIN A. V. AND BLAGOSKLONSKIY, T. I.

Tekhnicheskii analiz metallov kolorime picheskim metodom. M., 1954.  
28s s chert. 22 sm (Mosk. stankoinstrum. il-t im I.V. Stalina.  
Kafedra Khimii). 250 ekz B. Ts. (54-57739) 669.543+545.11

OCHKIN, A.V

25(1)

PHASE I BOOK EXPLOITATION

SOV/1439

Spravochnik metallista v pyati tomakh, t. 3, kn. 1 (Metals Engineering Handbook in Five Volumes, Vol. 3, bk. 1) Moscow, Mashgiz, 1958.  
560 p. 50,000 copies printed.

Ed. (Title page): V.S. Vladislavlev, Professor (Deceased); Ed. (Inside book): V.I. Krylov, Engineer; Tech. Ed.: T.F. Sokolova; Editorial Board: N.S. Acherkin (Chairman and Chief Ed.), Doctor of Technical Sciences, Professor, V.S. Vladislavlev, Professor (Deceased), A.N. Malov, Candidate of Technical Sciences, S.M. Pozdnyakov, A.Ya. Rostovych, G.B. Stolbin, and S.A. Chernavskiy; Managing Ed. for Reference Literature: V.I. Krylov, Engineer.

PURPOSE: The book is a reference book for technicians and engineers working in the field of machinery design and in production.

COVERAGE: The book covers the following: engineering specifications, treatment and use of cast iron, steel and carbides, heat treatment of steel and cast iron, specifications, treatment and use of nonferrous metals and nonmetallic materials. I.Z. Yasnogorskiy, V.P. Vologdin, N.V. Geveling are mentioned as

Card 1/14

**Metals Engineering Handbook in Five (Cont.)**

SOV/1439

having contributed to this field. There are 137 references of which 121 are Soviet, 13 English, 1 German, 1 Italian and 1 Polish.

**TABLE OF CONTENTS:****CAST IRON, STEEL AND SINTERED CARBIDES**

<b>Basic Information on Chemistry. D.I. Mendeleev's Periodic System of Elements (Engineer A.V. Ochkin)</b>	1
<b>Properties of the most important elements and their compounds</b>	1
<b>Properties of inorganic compounds</b>	14
<b>Properties of organic compounds</b>	45
<b>Basic constants of organic solvents</b>	55
<b>Decimal scale of hardness</b>	69
<b>Fire extinguishers</b>	72
<b>Radioactive isotopes</b>	75
<b>The most important radioactive isotopes</b>	76
<b>Methods for Determining the Hardness of Metals</b>	82
<b>Tables of the hardness numbers of metals</b>	86

Card 2/ 14

## Metals Engineering Handbook in Five (Cont.)

SOV/1439

Relationships of hardness numbers determined by various methods	89
Conversion of hardness values by the scleroscope method	90
Relationship between Brinell hardness number $H_B$ and ultimate tensile stress $\sigma_{UT}$ for various metals and alloys	90
Cast Iron Castings (V.M. Shestopal, and B.G. Grinberg, Candidates of Technical Sciences)	92
Mechanical properties	95
Physical and chemical properties	101
Physical properties	101
Chemical properties	103
Heat resistance	104
Technological properties	108
Steel Castings (L.I. Levi, Candidate of Technical Sciences)	117
Classification of steel castings	117
Effect of elements on properties of steel castings	121
Heat treatment of steel castings	126

Card 3/14

## Metals Engineering Handbook in Five (Cont.)

SOV/1439

Constructional Steels (N.P. Aristov, Candidate of Technical Sciences)	127
Tool Steels (V.S. Vladislavlev, Professor)	166
Classification	166
Carbon tool steels	166
Alloy tool steels	168
Basic steels recommended for manufacture of various kinds of cutting tools	173
Steels recommended for making measuring instruments	177
Steel inspection for nonmetallic inclusions and carbide liquation	179
Steels recommended for making dies for hot working	180
Steels recommended for making dies for cold working	182
Steels for making die casting molds	184
Microstructure of carbon and alloy tool steels at delivery	185
Defects of high-speed steels at delivery and inspection of microstructure	187
Carbide Alloys (V.S. Rakovskiy, Candidate of Technical Sciences)	190
General information	190
Classification of cemented carbide alloys	190
Properties of cemented carbide alloys and of "micanite" [Soviet name for a ceramic material]	191
Applications of cemented carbide alloys	192

Card 4/ 14

## Metals Engineering Handbook in Five (Cont.)

SOV/1439

Commercial list of cemented carbide alloy products	193
Survey of surfacing cemented carbides	193
Machining parts surfaced with cemented carbide alloys	194

## HEAT TREATMENT OF STEEL AND CAST IRON

Iron-carbon /cementite/ equilibrium diagram (N.P. Aristov, Candidate of Technical Sciences)	197
Macro-and microstructure of iron-carbon alloys	197
Macrostructure	200
Microstructure	203
Grain size of steel	210
Methods of determining grain size	210
Heat-treatment of Steel (Yu.M. Lakhtin, Professor, Doctor of Technical Sciences)	214
Heating of steel for heat treatment	214
Protection of steel from oxydation and decarburization during heating	221

Card 5/14

## Metals Engineering Handbook in Five (Cont.)

80V/1439

Grain of austenite	226
Cooling in heat treatment	227
Hardenability of steel	232
Annealing of steel	235
Defects occurring during heat treatment of steel	236
Heating furnaces and heat control instruments	240
Thermo-chemical Treatment (A.N. Minkevich, Candidate of Technical Sciences)	246
Carburizing of steel	246
Pack carburizing of steel	251
Gas carburizing of steel	255
Liquid carburizing of steel	262
Structure and properties of carburized steel	267
Cyaniding of steel	268
Cyaniding of steel in cyanide baths	268
Gas cyaniding of structural steel	273
Structure and properties of cyanided steel	275
Low-temperature cyaniding of high-speed and high-chromium alloyed structural steel	276
Structure and properties of steel subjected to low-temperature cyaniding	278

Card 6/14

## Metals Engineering Handbook in Five (Cont.)

SOV/1439

Nitriding	278
Anticorrosive nitriding	279
Nitriding alloy steel for surface hardening	283
Methods of nitriding alloy steel	286
Structure and properties of nitrided alloy steel	290
Aluminum cementation (aluminizing)	291
Chromium cementation (chromizing)	295
Subzero Treatment (cold treatment) (V.S. Vladislavlev, Professor)	300
Fields of application	300
Essentials of structural transformations in subzero treatment of quenched steels	301
Stabilization of residual austenite in quenched steels	303
Cold treatment of carburized steels	304
Cold treatment of high-speed steels	306
Surface Quench Hardening of Steel (I.M. Kidin, Professor, Doctor of Technical Sciences)	307
Methods of surface quench hardening	307
Surface quench hardening by flame heating	307
Electrolytic quench hardening	308
Card 7/14	

**Metals Engineering Handbook in Five (Cont.)**

**887/1459**

Quench hardening with electric resistance heating	310
High-frequency quench hardening	310
Kinetics of induction heating of steel	312
Special features of phase changes in induction heating of steel	312
Process parameters of induction heating in quench hardening	314
Preferred and prohibited regimes of induction heating in quench hardening	315
Tempering after high-frequency quench hardening	317
<b>Heat Treatment of High-speed Steels (V.S. Vladislavlev, Professor)</b>	<b>318</b>
Annealing	318
Quenching	319
Tempering	319
Straightening	319
<b>Corrosion and Methods of Protecting Metals Against It (T.I. Blagoeklonskiy, Candidate of Chemical Sciences)</b>	<b>320</b>
Definition and classification of corrosion	320
Corrosion test methods and means of evaluating corrosion	320
Protection of metals against corrosion	323

Card 8/14

Metals Engineering Handbook in Five (Cont.)

SOV/1439

Method of Metal Coating Surfaces by Spraying (N.B. Katts, Candidate of Technical Sciences)	329
Basic equipment	329
The metal coating process	338
Some properties of the coating	344
Sulfidation of the Surfaces of Machine Parts and Instruments (Ye.L. Kirshenshtein, Engineer)	346
Sulfidation process	347
Composition of the bath	347
Results of sulfidation	347
Sulfidation equipment	351

OTHER METALS AND NONMETALLIC MATERIALS

Copper and Copper-base Alloys (A.A. Lunev, Candidate of Technical Sciences)	352
Zinc and Its Alloys (O.Ye. Keetner, Candidate of Technical Sciences)	362

Card 9/14

Metals Engineering Handbook in Five (Cont.)

SOV/1439

General information and zinc trademarks	362
Physical properties	363
Mechanical properties	364
Chemical properties	366
Applications in engineering	366
Zinc alloys	368
Tin (O.Ye. Kestner)	370
General information and tin trademarks	370
Physical properties	371
Mechanical properties	372
Chemical properties	372
Applications in engineering	373
Lead and Its Alloys (O.Ye. Kestner)	374
General information and lead trademarks	374
Physical properties of lead	377
Mechanical properties	377
Chemical properties	378
Applications in engineering	379
Lead alloys	380

Card 10/14